Recent Collaboration Between the Rosebud Sioux Tribe, Sinte Gleska University, and the USGS







The Rosebud Sioux Tribe, Sinte Gleska University, and the USGS signed a Memorandum of Understanding in Fall 2000 to work together to enhance science education for Native American students. Since that time, the partnership has fostered successful collaboration—partnerships, workshops, and online course.

Workshop in Geographic Information Systems (GIS) for Professionals from the Rosebud Sioux Tribe and Sinte Gleska University



During 2002, a group of tribal and university professionals from water resources, land records, cultural resources, biology, and other

fields gathered for three days of GIS training.



Sinte Gleska University, on the Rosebud Sioux lands in Mission, South Dakota, was the site for many of the workshops described in this report.



James Rattling Leaf, right, from the Sicangu Policy Institute, and Joseph Kerski from the USGS conducted the workshop. The workshop emphasized the use of digital spatial data, including computer maps, satellite imagery, and aerial photographs. Participants collected field data with GPS, brought field data into a GIS, analyzed base spatial data from the Internet, analyzed natural hazards and demography, and engaged in other activities. The goals were to bring different departments and organizations in the tribal government together to work on joint projects, and to help tribal professionals make wise decisions about the Earth and its people. Attendees were enthusiastic about the workshop and it was a privilege to work with them.



Each workshop is a hands-on experience using Geographic Information Systems software by ESRI, Inc.

Workshop in Geographic Information Systems for SGU Students Training to Become Full-Time Geography Teachers

In August, educators gathered for two days of GIS training through a geography teaching course.



Through the workshop, future and current teachers became familiar with the power of GIS technology and methods, and learned about ways to implement GIS in their own classrooms.



Each workshop includes a segment on collecting field data and coordinates with Global Positioning Systems (GPS).

Introduction to Geographic Information Systems and Science, Sinte Gleska University, Fall 2002 Semester

SGU endorsed an online course in GIS as a part of its long-term goal making SGU a focal point in spatial analysis in the country, instructor was Joseph Kerski. The location of the online course is:

http://rockyweb.cr.usgs.gov/public/ outreach/sgu/sgugis.html



Course Goals: To understand the principles, applications, trends, and pertinent issues of GIS, to become competent in solving problems with spatial analysis by using GIS software (ArcView 3.2), to increase proficiency in communicating objectives and results of research and production conducted with GIS, to understand how to obtain and analyze data such as that focused on watersheds, population, cultural resources, terrain, natural hazards, land cover, and land ownership and to gain an understanding of how to manipulate and apply vector and raster spatial data, particularly with regard to Native American issues, emphasizing lands in and near the Rosebud Sioux region of South Dakota.

GIS Workshops and Information Exhibits at 2001-2003 National Indian Education Association Conferences



For the past three years, Joseph Kerski, James Rattling Leaf, and Jhon Goes in Center have worked to share their collaborative efforts with others at the National Indian Education Association conferences. These conferences attract 3,500 people annually from tribal government, nonprofit organizations, and primary, secondary, and university education. The efforts include training in GIS and operating informational exhibits together with staff from the USGS EROS Data Center.



Above, Carrie Jucht, USGS Information and Outreach Specialist, works with an attendee at the information exhibit at the conference.



Above, James Rattling Leaf addresses the attendees during the GIS workshop. Below, participants analyze the Earth through GIS.

